

REMARKS

Claims 1-20 were pending in the application. By this paper, Claims 1-9, and 15 have been cancelled, and claims 21-36 have been added. Therefore, Claims 10-14 and 16-36 are presented for examination herein.

IDS

Please consider the additional references cited on the accompanying IDS.

Claim Rejections under 35 USC 112

Claim 6, and 7

Claims 6 and 7 have been cancelled.

Claim Rejections under 35 USC 102

Claim 1

Claim 1 has cancelled. However, claim 30 is similar in ways to Claim 1 (35 USC 112 support for Claim 30 is discussed below). To understand the differences between the aspects of the Applicants invention recited in Claim 30, and the Rondeau reference, please consider the Rondeau reference (US5,796,728) and note especially the passages cited below:

“By use of the aforesaid internet communication protocol, the host computer 34 is able to send data packets to the transceiver 12 and make various modifications thereto remotely, even while the remote system 10 is moving and in use. In other words, remote over-the-air programming minimizes or avoids the need to bring the remote system 10, and hence one or more of a fleet of vehicles, to a shop to make these changes. Further, when using an internodal gateway, i.e., various nodes connected together by an ethernet link using internet protocol, the radio 12 could be reprogrammed even through a roamed node.” Rondeau, Col. 4, lines 24-34.

“Through use of the above-described communication system and method, various programmable features of remote radios, such as personality, feature encryption data and tracking data are modifiable over the air. Furthermore, since the communication is two-way, information from the remote unit, such as a particular radio's serial number stored in ROM, can be transmitted back to the host computer 34 for further processing.” Rondeau, Col. 5, lines 58-65.

“The preferred data communications protocol, ProFile, used in the present invention follows a strict client/server model where the remote radio 12 is considered to be a server in a permanent listening state and the host computer 34 is a client requesting service. Personality data for a radio may include the radio's status information, i.e., radio identification as to the type of radio being accessed, the radio's LID, site information including site identifiers and frequencies, group identification, the hardware version level of the radio, the type of compression algorithm supported by the radio, available EEPROM and flash ports available, the sizes of the feature, tracking and key data currently in the radio, the versions of software, the serial number for the

Appl. No. : 09/698,882
Filed : 10/27/2000

ROM which identifies each radio and which is used when determining new feature data for the radio, a field indicating whether the radio's encryption table was zeroed, the ROM version and the size of the radio's flash code. It should be understood that some of these parameters are fixed and others variable and thus programmable." Rondeau, Col. 5, lines 66 to Col. 6, line 17.

"Similarly, tracking data for the particular radio can also be downloaded. For example, the non-linear characteristics of the electronics can be compensated for in software, e.g., making adjustments to the hardware's frequency parameters." Rondeau, Col. 5, lines 66 to Col. 6, line 17." Rondeau, Col. 6, lines 18-22.

As discussed in the citations above, the Rondeau reference discloses a radio whose personality parameters can be reprogrammed instead of having to bring the units into the shop for maintenance and upgrade, but the concept of modifying the radios to roam onto previously incompatible networks using a roam management server is not taught or suggested. Rondeau does teach that the radio personality updates can be performed in a roamed network, but he is silent on the concept of dynamically downloading executable software to reprogram a software radio processor to implement a new air interface protocol and to perform the roam at least partially by executing the newly downloaded executable code in order to communicate with the second wireless access point whose air interface protocol was not previously loaded into the mobile unit. This is a novel feature of this claim set (claim 30), but applicant notes that other limitations involving other aspects of the Applicant's invention disclosure may be used in various combinations to construct other novel claims without this limitation.

Claim 10

Claim 10, the Preston reference (US6,236,652), and the Examiner's rejections have been studied in great detail by Applicant. Applicant submits that the Preston reference does not anticipate but rather teaches away from Claim 10.

Applicant respectfully submits that none of the Examiner's citations to the '652 patent teach a method of processing in a network server that communicates with the client at the transport layer or above, receives a geo-location from the client, sends parameters relating to a second air interface access point to the client, and sends a code to the wireless access point indicating to provide access to the client. Instead of a central network server that uses a connection at the transport layer or above, the '652 patent teaches a network layer addressing protocol whose network layer addresses are based on geolocation information. The '652 patent

Appl. No. : 09/698,882
Filed : 10/27/2000

teaches away from central server based aspect of the Applicant's invention as claimed in Claim 10. This can be seen from the citations below.

'652 at Col. 5, line 59 to Col. 6, line 23:

"The present invention upends this conventional arrangement. According to the present invention, it is the "client" or end user device, such as a mobile phone or laptop computer, that assigns its own IP address, rather than look to a server or host. Thus we define a new DCCP: Dynamic Client Configuration Protocol. The client now acts as a server in that it can communicate directly onto the larger network, even the Internet, reducing the number of intermediate machines. Thus, this newly independent client, having assigned its own IP address (based on global location), can emulate a gateway or router, encapsulating its own packets as it chooses. Addresses are resolved from the client up, rather than from the host down as in prior art. This new paradigm has remarkable potential to traverse the Internet much faster than the prior art systems, driving communication latency and overhead far below present levels."

By driving the protocol stacks to the end user, as opposed to the base station in the wireless carrier's network, voice can evolve to a position of "voice over data" transport. The concepts of the present invention lay the foundation for integration of smart wireless devices, that can generate unique IP addressing schemes, that in turn support SLIP or PPP for anycast and unicast decentralization, tunneling protocols like PPTP that support VRN's, and the connection oriented protocol (TCP) for transport from the session to the network. The missing key element we have determined is an addressing scheme that supports all of the above in a unique way, such that resolved conflicting addresses are on the exception rather than the rule. The intelligence and control must be driven to the communications device in order to achieve effective routing real time data transfer.

"Intelligence for network management needs to be decentralized to the user. Unique addressing schemes are needed to support the role reversal. Geo-IP works through a protocol stack called Dynamic Client Configuration Protocol (DCCP), where the IP address is handed to the host as a unique node address. Conflicts that arise because of close proximity are resolved on the exception." Col. 7, lines 13-19.

Note that in '652 patent (see the citations above and the ones cited by the Examiner), the interaction is between the end user device and the wireless base station, and the end result is to assign a new IP address. This is all at the network layer teaches in the opposite direction from Claim 10, where a client device communicates via an upper layer (transport or above) with a centralized network server, provides geo-location information the centralized network server, and then the centralized network server sends to the client access related information to a local gateway, and the centralized server also sends access information to the gateway itself.

More specifically, we can note that the preamble of claim 10 is not anticipated by the '652 patent because a distributed system where the client acts as the server is taught as opposed

Appl. No. : 09/698,882
Filed : 10/27/2000

to a central server approach. The first claim element is not met because the '652 interactions are at the network layer (below the transport layer). Also, no central server then performs the coordinating operations of the third and fourth claim elements of claim 10. So the Applicant submits that the '652 patent is not anticipatory at all of claim 10, but rather teaches a considerably different type of system that uses different techniques and structures to achieve a completely different result. The added wherein clause adds further clarification.

Claim 16

The same arguments made in connection with Claim 10 apply generally to Claim 16.

New Claims (21-35)

35 USC 112 support for claims 21-36 can be found, among other places, at Fig.'s 1-3 and on page 7 to the top of page 19.

Applicant respectfully submits that the new claims are not anticipated or rendered obvious by the art of record.

Summary

Applicant hereby specifically reserves the right to prosecute claims of different or broader scope in a continuation or divisional application.

Applicant notes that any claim additions or cancellations made herein are made solely for the purposes of more clearly and particularly describing and claiming the invention, and not for purposes of overcoming art or for patentability or narrowing the claims. The Examiner should infer no (i) adoption of a position with respect to patentability, (ii) change in the Applicant's position with respect to any claim or subject matter of the invention, or (iii) acquiescence in any way to any position taken by the Examiner, based on such additions or cancellations.

Furthermore, any remarks made with respect to a particular claim or claims are intended to be limited only to such claim or claims.

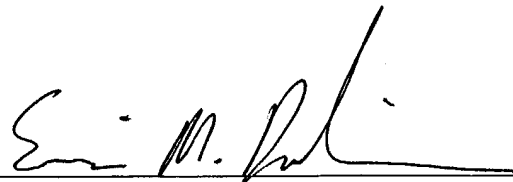
If the Examiner has any questions or comments which may be resolved over the telephone, he is requested to call the undersigned at (305) 735-8533.

Appl. No. : 09/698,882
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Respectfully submitted,

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